

The Effect of Demographics on Emotional Quotient in Military Medical Students

ENS Amanda Sniadach OMSIII, ENS Mackenzie Berry OMSIII, 2LT Jacob Doyle OMSIII, 2LT Sunjin Oh OMSIII, 2LT Raul Betancourt-Perez OMSIV, Isain Zapata PhD, Anthony LaPorta MD

OBJECTIVE

The purpose of this study was to assess the differences in emotional quotient during a high stress military trauma simulation of RVU military students by measuring different demographics including race, marital status, and sex in the medical students.

METHODS

- The study consisted of 103 students (78 male, 25 female; 85 Caucasian, 11 Asian, 6 Mixed; 66 single, 37 married) attending RVU from three sessions (2017, N=30; 2018, N=32; 2019, N=41). All participants were contracted with the U.S. military, and placed in a hyper-realistic mass-trauma simulation to induce stress.
- Participants filled out EQ questionnaires before and after the training using the Veracity TouchScreener® tablet, which records significant psychophysiological responses.
- All the responses were pooled across 2017, 2018, and 2019. Contingency tables were analyzed for marital status, gender and race using a Cochran-Mantel-Haenszel test for Nonzero Correlation.





Table 1. Effect of Marital Status on EQ

Marital Status: EQ questionnaire						
Marital Status P=0.0774						
	Answer					
	SPR	No	Admit	Total		
	53	388	114	555		
Single	51.25	377.50	126.25			
	0.8068	0.5889	0.2756			
Married	29	216	88	333		
	30.75	226.50	75.75	333		
	0.7523	0.4854	0.1593			
Total	82	604	202	888		

Table 2. Effect of Gender on EQ

Gender: EQ questionnaire						
Gender P=0.3666						
	Answer					
	SPR	No	Admit	Total		
Male	64	467	171	702		
	62.10	464.21	175.69			
	0.8092	0.8972	0.7235			
Female	18	146	61	225		
	19.90	148.79	56.31			
	0.6697	0.8193	0.5320			
Total	82	613	232	927		

Table 3. Effect of Race on EQ

Race: EQ questionnaire						
Race P=0.8110						
	Answer					
	SPR	No	Admit	Total		
Caucassoid	65	506	194	765		
	66.67	500.00	198.33			
	0.8382	0.7884	0.7583			
Mongoloid	14	54	31	99		
	8.63	64.71	25.67			
	0.0674	0.1832	0.2925			
Mixed	1	40	13	54		
	4.71	35.29	14.00			
	0.0876	0.4283	0.7893			
Total	80	600	238	918		

RESULTS

Emotional quotient (EQ) data for race, gender, and marital status was **not found** to be significantly different among the demographics tested across the years.





CONCLUSIONS

- Medical students have similar emotional quotients during high stress regardless of marital status, gender and race.
- ☐ In other words, medical students have a consistent response that is unlikely to conflict with their performance.

Although our study cannot disprove the existence of EQ results during stress, it does suggest a small correlation. In future studies we would like to compare emotional quotient data across different professions such as physician assistants, nurses, first responders and social workers.

REFERENCES

 Pizitz TD. Detecting Alcohol and Drug Use with the Touch of a Finger. American Journal of Applied Psychology. 2015;4(4):90.